

ABSTRACT

An electrode (12) is used for discharge surface treatment for causing, with a green compact obtained by compression-molding powder containing metal or a metallic compound as an electrode (12), electric discharge between the electrode (12) and a work piece (11) in a machining fluid (15) or in an air and forming, using discharge energy of the electric discharge, a film 14 consisting of an electrode (12) material or a substance generated by reaction of the electrode (12) material due to the discharge energy on a surface of the work piece. The powder has an average value of particle diameters not more than 3 micrometers.